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ABSTRACT

To create a model linking Title I and service learning, researchers conducted: (1) focus groups with service learning and Title I practitioners to determine their understanding of practices promoting authentic learning for disadvantaged students; (2) a literature review on effective education for disadvantaged children and a study of relationships between service learning and academic performance; (3) a design of the Title I service learning program model; and (4) implementation of the model. A final study phase will determine its impact on student learning. Linking Title I and service learning allows disadvantaged children to increase academic knowledge and skills, connect learning theory and practice, learn how to learn, and develop caring, responsible attitudes. Authentic learning and a service learning philosophy help children see connections between curriculum and their own lives and may boost student achievement. This study's six participating urban, rural, and suburban schools had varying poverty levels. Common program components included motivating learning environments, an accelerated reading program, peer tutoring, and professional development. Preliminary findings suggest that the schools had varying success. A critical mass of teachers at each site carried the initiative forward, committing to quality teaching and learning for all students. Findings suggest that grounding Title I programs within service learning philosophy provides greater opportunities for students to achieve states' high performance and content standards. (SM)

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Linking Title I and Service-Learning
A Model to Promote Authentic Teaching

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Introduction

This paper shares findings from a study addressing our experiences these last two years in designing and implementing a research-based model linking Title I and service-learning. The research phase of this project included conducting a series of focus groups with service-learning and Title I practitioners in four states to ascertain their understanding and beliefs about programs and practices to promote authentic leaning for students at risk. We conducted a synthesis of the literature on effective educational practices for children of poverty. We also studied service-learning program models to examine the relationship between service-learning and academic performance.

The second phase of this study involved designing a Title I service-learning program model, using the research synthesis and legislated requirements of Title I of Improving America's Schools Act (IASA). The third phase has been the implementation of this model at schools in five states. Demonstration site variables have included schoolwide and targeted assistance Title I programs; rural, urban, and suburban schools; elementary, middle, and high school Title I programs; schools serving special populations of students; and schools with voluntary or state-mandated service. The final phase of this study is to determine how a Title I service-learning model impacts student learning. Various indicators for student success will be used, including student performance on Title I mandated state assessments.

This research summarizes our progress toward studying the impact of a service-learning philosophy on student learning. As a prerequisite to looking at student learning, we also raise important issues surrounding authentic teaching. To facilitate this discussion this paper is

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organized into the following sections: (1) a rationale and overview for linking Title I and service-learning; (2) the impact of service on student learning; (3) an examination of authentic teaching and learning and conditions for success; (4) an overview of the demonstration sites -- purpose, goals, implementation strategies and progress; and (5) preliminary findings from demonstration sites.

Rational and Overview of Linking Title I and Service-Learning

The numbers of students who have been traditionally regarded as at risk -- poor children and children of color -- are growing in numbers. It is projected that by the year 2020 about one-fourth of children will live in poverty, and children of color will comprise more than half of students in public schools (Natriello, McDill, and Pallas, 1990, pp. 36-38). Compounding this reality is the fact that many children today are subjected to adverse conditions (e.g., newborns having been exposed prenatally to drugs, rampant homelessness, abuse, and inadequate prenatal care) that negatively affect their learning and put them at risk of school failure (Stevens and Price, 1992). Consequently, what is needed are strategies for improving schools' readiness and ability to meet the projected educational challenges posed by the increasing numbers of children who are comprising the so called "at risk" population of students.

The purpose of the reauthorized Title I program is to help educationally disadvantaged children meet educational content and performance standards as specified by states. Service-learning as a strategy for Title I service delivery shows enormous promise based on the research literature on what works for students at risk. As students use academic content and materials to perform meaningful community-based tasks or address authentic problems, they become increasingly motivated to learn more of the higher order thinking skills (analysis, synthesis, and evaluation) in schools.

The research on effective schools for disadvantaged students supports the adoption of a service-learning strategy for Title I. The research literature indicates that children of poverty, like their more advantaged peers, learn best when:

- there are opportunities for them to use their own experiences as a foundation for learning;
- they experience instruction that highlights meaning and understanding;
- programs recognize that students sometimes learn best by directing their own learning and by working together;
- there is assessment that informs these students and their families of their progress in skill development and applying new knowledge;
- family and community members are involved;
- programs show respect for student's cultural and linguistic backgrounds; and
- academic learning time is extended.

When service-learning programs are designed and implemented using the "Principles for High Quality National Service Programs," they use experiential learning situations to further students' abilities to think clearly and analytically, and to process knowledge more effectively. The exemplary school-based service-learning projects teach students reflection techniques to help them to make meaning of their service experiences and to build bridges between classroom pedagogy and real life application. Exemplary projects encourage high expectations and build on student's strengths.

Title I programs, that have traditionally served at risk students, have the potential to become more viable programs if they are designed around a philosophy and strategies incorporating service-learning principles and concepts. By linking Title I with service-learning programs, children from high poverty areas will have opportunities to achieve the following program outcomes:

- students will develop and increase their academic knowledge and skills;
- students and teachers will connect learning theory and practice;
- students will learn how to learn; and
- students will develop more responsibility, a sense of caring, and a service ethic.

As students use academic content and materials to perform meaningful community-based tasks or address authentic problems, they become increasingly motivated to learn more of the higher order thinking skills (analysis, synthesis, and evaluation) in school. Studies have shown that students who participate in community service programs increase their higher order thinking skills, such as problem solving, more than students in comparison groups (Conrad and Hedin, 1992).

The Impact of Service on Student Learning

There is a significant body of literature showing the relationship between student involvement in service-learning and the affective (i.e., personal growth and development and social growth and development) impact on students. One study reports the following social/psychological outcomes among the effects of experiential learning programs: (1) a heightened sense of personal and social responsibility; (2) more positive attitudes toward adults and others; (3) more active exploration of careers; (4) enhanced self-esteem; and (5) more complex patterns of thought (Conrad and Hedin, 1991). Our own research during phase one of this project revealed that while many practitioners endorse the effects of service-learning programs, there is little empirical evidence to indicate that service-learning strategies are correlational to academic outcomes.

States, however, are required to evaluate outcomes from their Learn & Serve programs. Although academic outcomes is one of the areas evaluated, the data is generally vague and not directly related to accountability standards on state assessments. An example is the Florida Learn & Serve program evaluation that reported five categories of outcome data: (1) student GPA, (2) absences, (3) discipline referrals, (4) integration of service learning into the curriculum and (5) school/community partnerships. Concerning student GPA they reported that 52 of 105

sub-grantees responded to questions about students' GPA before and during their service-learning sub-grant. Thirty-six of the 52 (70%) indicated an improvement in grades during the program. Of those that improved, 15 of 36 (42%) gained 0.5 point or more in their GPA. Ten of the 52 (19%) reported that students' grades stayed at the same academic level. Six sub-grantees reported that their students earned lower grades. Other states have reported similar data.

One evaluation of the Experience Based Career Education (EBCE) program sponsored by the National Institute of Education found that EBCE students, who spent as much as 80 percent of a full school year in work settings, scored as well on standardized tests as did comparable full-time students in classrooms (Hamilton, 1986). The CORS study that addresses the impact of authentic pedagogy reports that restructuring can help equalize students' opportunities to learn and student achievement (Newmann and Wehlage, 1995). While this study does not directly correlate authentic pedagogy to service-learning, we believe that the standards for authentic pedagogy (i.e., students engaging in construction of meaning, disciplined inquiry and learning that has value beyond school) is consistent with a service-learning philosophy. Our intent in linking Title I and service-learning is to lend academic legitimacy to service-learning and to validate this approach as one that will enable all children, especially those most at risk, to achieve states' high standards.

An Examination of Authentic Teaching and Learning

1. **Components of authentic teaching and learning.** According to Newmann and Wehlage (1995, p. 13)

> teachers communicate what is important to learn through two main activities: the tests or other tasks they use to assess student mastery, and the instruction they conduct to help students prepare for the assessment.

Together these comprise pedagogy. Their four year national study on restructured schools

concludes that instruction must be focused on authentic pedagogy if students are to achieve high standards of intellectual quality. These standards include:

- Students constructing meaning and producing knowledge (organizing, synthesizing, interpreting, or evaluating complex information; considering alternative solutions, strategies, or points of view);
- Students using disciplined inquiry to construct meaning (showing understanding and use of ideas, theories, or perspectives central to an academic discipline; using methods of inquiry, research, or communication characteristic to an academic discipline); and
- Students aiming their work toward production of discourse, products, and performances that have value or meaning beyond success in school (elaborating on understanding or conclusions through extended writing or other demonstrations or products; addressing a concept, problem, or issue similar to one that they may encounter outside the classroom; communicating knowledge, presenting thinking, or taking some action beyond the classroom and school).

We believe that if learning is to be authentic (i.e., real, relevant, and meaningful) for students then teaching should be grounded in instruction that utilizes a coherent, integrated learning approach and allows students to have ownership in, and share responsibility for their own learning.

Coherent, integrated curriculum is one that reflects the real world, is interactive and involves the learner's entire self, thoughts, feelings, senses, and intuition. Through integrated teaching and learning that organizes information around conceptual themes, teachers can provide learning experiences that unify knowledge and promote a greater understanding as opposed to students examining the subject separately. This kind of teaching enables complex thinking skills in students which is a necessity as they begin to grapple with real issues and problems that transcend the boundaries of disciplines. By bringing relevance to students' lives, coherent, integrated curriculum has an added benefit. Research shows that students attribute the lack of relevance as one of their main reasons for dropping out of school. Implementing a coherent

curriculum should directly affect this issue, and thus create at least one condition of success needed for Title I students.

In addition to instructional design considerations, authentic teaching and learning also relies on theories such as brain-based learning, multiple intelligences theory, and constructivism. Of primary importance to brain-based learning is the idea of teaching for meaningfulness. Through this kind of instruction students become creators or producers of knowledge, rather than solely reproducers of knowledge who learn primarily from rote memorization. While meaningful learning is active, and experientially-based, this requires more than merely implementing participatory, "hands-on" activities. Rather, it involves providing appropriate experiences for students to actively process experiences through reflective analysis. It also involves the acknowledgment of the brain's rules for meaningful learning and organizing teaching with those rules in mind. Caine and Caine (1991) identify 12 principles of brain-based learning that impact how children learn. These principles emphasize that the brain seeks both wholistic and specific, concrete perceptions.

The theory of multiples intelligences supports the belief that intelligence has much more to do with a person's capacity to solve problems and create products in a context-rich and naturalistic setting. While schools have traditionally focused on linguistic and logical-mathematical intelligence, current educational models are beginning to focus on other ways of demonstrating intelligence. Project-based learning includes constructive, contextual, active, and cooperative learning, and incorporates and facilitates maximum usage of all the intelligences. This would be consistent with the goals of service-learning which would also include use of intrapersonal intelligence or the ability to engage in metacognition and self-reflective analysis that is integral to service-learning.

Constructivist learning is that which occurs through the creation of meaning or the individual construction or "sense-making" of reality. A service-learning philosophy enables a more natural way for children to see connections between curriculum and their lives, as their communities and life realities often become the basis for solving what they perceive as relevant problems. The context for instruction becomes the students' political, social, economic, and cultural reality and has more potential to take on personal meaning and significance. In constructivism, learning is structured to maximize opportunities for students to express their points of view and to reveal and/or reflect on their thoughts and ideas. This fosters intellectual growth. Assessment from a constructivist theory perspective measures complex, higher order thinking such as problem-solving and critical thinking rather than merely knowledge attainment.

2. Conditions to promote authentic pedagogy. While the evidence reveals that authentic teaching can help to boost student achievement for all students, the research also points out that certain conditions or factors need to be in place in order for this to occur. We can not assume that preoccupation with the tools of restructuring will automatically result in high intellectual quality student learning. Newmann and Wehlage (1995, p. 29) concur that

> the challenge is not just to adopt innovation, but to learn how to use new structures to enhance faculty and student concern for learning of high intellectual quality. Without aiming toward this end, there is little reason to implement innovative structures.

They go on to say that (p. 29)

> a school's success in educating students depends on the commitment and competence of individuals within the staff...When schools are unable to coordinate teachers' diverse aims for students into a curricular mission focused on high quality student learning, when teachers have few opportunities to work together to devise approaches suited to the school's student body, or when schools pursue multiple innovations without sustained, long-term consistency, it is difficult for even the most gifted teachers to make a positive difference for students.

After studying quality education practices in elementary schools Rosenholtz (1989) identified schools as either being "stuck" or "moving." Schools she labeled as stuck were those that were not supportive of change and improvement and had a high degree of teacher uncertainty and isolation. She found that a high incidence of these behaviors correlated negatively with student learning gains in reading and math. While "learning impoverished" schools had contrary implications on teachers, the end result was detrimental to students as well. Quite the opposite was true with those schools labeled as "moving."

Thus in order for students to engage in meaningful learning, opportunities must be present for staff to likewise engage in meaningful and collective learning. Schools cannot be re-created as collaborative learning communities without sustained professional development and dialogue. This entails faculty reaching clarity and consensus about central goals for student learning and sufficient flexibility to encourage debate, discussion, and experimentation within the framework. Thus, schools need to become learning communities that foster teachers' intellectual growth and professional development, as well.

Overview of Demonstration Sites

To recruit schools for involvement as demonstration sites for the Title I service-learning project, we developed a concept paper that outlined the purpose of the project, gave background information, identified project objectives, and listed criteria for site selection. The intent of the demonstration projects was to accomplish three objectives:

1. Teachers will develop a clear understanding of how linking service-learning with Title I will help students improve academic skills in areas such as reading (skimming, comprehension, categorizing), writing (organization, composition), communication (questioning, sharing information), mathematics and problem solving, and scientific exploration, as measured by the state's assessments, teacher evaluation, and grades.

2. Teachers will be exposed to current research on teaching and learning philosophies and theories such as authentic teaching, integrated and coherent curriculum, brain-based learning, multiple intelligences theory consructivist theory, and reflective practices. This information will help teachers create an environment where students will become producers rather than reproducers of knowledge. Moreover, teachers will help students benefit from improved self-esteem and develop interpersonal skills, as measured by pre- and post-testing and by teacher evaluation of student participation in activities.

3. Teachers will be exposed to Title I service -learning methods that will help students and teachers, alike, develop a knowledge about needs in the community and the important role of individual service in meeting those needs.

Nine criteria were identified for site selection. These included:

- a Title I program in either an elementary, middle, or high school program that was either a targeted assistance or schoolwide program;
- a demonstrated need for implementation of the project -- either the poverty level must be such that the school qualifies as a schoolwide program or educational need of children must be such that students qualify for targeted assistance;
- a commitment to school improvement for all students to reach their highest potential must be made by all participants;
- a willingness to engage in an intensive improvement and problem-solving process with participants who wish to become both teacher and learner in a supportive and creative environment;
- a "risk free" learning environment that builds capacity for staff;
- a willingness to establish ground rules to be enforced by the group;
- an ability to work together to find ways to create time to plan an implement the process in a timely, but sensitive manner;
- a willingness to incorporate time to celebrate each small step along the way; and
- a school with a relatively stable school staff with minimal turn over to insure success for the program.

The following sites have been selected to participate in this project:

	Elementary	**Middle**	**High**
Urban	Woods (La) Harrington (CO)	Bunche (LA)	
Suburban	Canutillo (TX)	Canutillo (TX) Hohokam (AZ)	Canutillo (TX)
Rural	Elwood (KS)	Elwood (KS)	

Ethnicity make-up and poverty levels vary among the schools. Elwood, a small K-8

school comprised of 160 students, is nearly 100% Anglo with a poverty level of 60%. Woods Elementary is 99% Afro-American students, 1% other and has over 75% of its students qualifying for free and reduced lunch whereas Bunche Middle School is made up of 98% Afro-American students and 2% other with also 75% of its students on free and reduced lunch. Bunche Middle School is a newly refurbished middle school this year with a new school at a new location. Canutillo, a large suburban school district of 4500 students, is nearly 100% Latino with 100% poverty; Hohokam has about 600 students with a poverty level at 70%. Ethnic composition of Hohokam students is 48% Latino, 31% Native American, 18% Anglo and 2% African-American. Harrington has 665 students comprised of 66% Latino, 30% African-American and 4% other. Ninety-three of the children are entitled to free or reduced-price lunch. The educational program is 50% bilingual with many of the students actually being monolingual Spanish-speakers.

1. **Elwood Elementary School.** To explicate how these schools have integrated service-learning into their Title I program, we provide an overview of the schoolwide plan at the Elwood Elementary School as this school has been involved in the program the longest period of time. While funding didn't officially begin until September 1, 1996, Elwood was recruited last April , contingent on receiving funding from the Corporation. Consequently, Elwood's schoolwide plan for the 1996/97 school year incorporated service-learning as one of the strategies they would use to meet the goals specified under their plan. Upon notification from the Corporation for funding, professional development for linking Title I and service-learning has been occurring monthly since September, 1996.

The mission of Elwood Unified School District is to provide a learning environment in which students will be inspired and motivated to achieve their highest potentials as

productive, responsible, contributing members of their families, work place, community, and the world in which they live. As part of their schoolwide Title I and school improvement plans Elwood has incorporated specific strategies for meeting Kansas's Quality Performance Accreditation (QPA) standards that have been in place since the early 1990s. QPA, an outcomes-based accreditation process, judges a school's quality by how well all of its students are performing and their continual academic improvement. Outcomes comprise both process and student outcomes. Three student outcomes identify standards for achieving essential skills, communication skills, and complex thinking skills. (See Appendix A for Standards defined by these outcomes.) Accountability of progress towards achieving the state's standards is determined primarily by state assessments in math and reading with encouragement to use multiple assessments as well.

Based on results from the 1996 Kansas State Reading and Math Assessment, Elwood students ranked considerably lower than the state's established standards (i. e., math standard of 75% on problem solving, reasoning, communication and math power index and reading narrative standard of 80% and expository standard of 77%). Elwood focused its schoolwide plan on strategies that would enable students to show gains in each of these areas. Service-learning has been incorporated as a strategy to ensure more effective implementation of all their program goals.

One strategy they are using is the Accelerated Reader Program, an incentive program that keeps students motivated to read. To implement a service-learning component into this strategy, students in the 6th grade have formed a Research and Development committee to develop, implement, and operate a store where children throughout the school will be able to purchase merchandise with the points they receive from achieving reading goals. Students

have been honing their written communication skills through writing letters to local community businesses to solicit funding for financial support of the store. Children in these grades are also graphing other student's reading achievement scores, interpreting these graphs and based on this analysis are suggesting reading level books for other children involved in the program. Sixth grade students have also surveyed all the students in the school to determine what kinds of merchandise they should purchase for the Accelerated Reader store. They are analyzing and interpreting this data through the creation of graphs, charts, spread sheets, and narratives. This exercise has enabled students to practice numerous skills identified by the QPA math and reading content standards.

Children in the 7th and 8th grades are involved in a peer tutoring program for younger primary level children. Nineteen students have participated in tutoring 18 children. The tutoring program takes place twice a week between 7:30 and 8:00 in the morning. In addition to assisting younger children, teachers report the older children's reading abilities and comprehension skills are improving tremendously. The 7th grade teacher reported that some of her students have done a "180 degree turn around" from the beginning of the year. As an added benefit to noticeable improvement with cognitive skills, the 1st grade teacher reported that she is seeing a general resurgence among the children of caring and looking out for each other.

While the Accelerated Reader program has defined service to community as the school, other ideas for integrating service-learning into the Title I program have a larger focus on the broader community. Older students are involved in a "living" history project that involves interviewing elderly citizens, researching archives, and writing a book about Elwood's early history. (See Appendix B for a detailed description of how this project meets

QPA outcomes for mastery of essential skills, effective communication skills, and complex thinking skills.) A holiday service-learning project entailed primary level students creating a Christmas store where handmade, inexpensive gifts were made available to other students to purchase for their sibling and parents. In addition to being a service to students, this project provided an opportunity for students to apply their math skills for pricing of materials and selling of products. All curricular ideas are enabling student progress toward achieving QPA standards and outcomes.

Professional development has been an extensive part of the Title I and service-learning project at Elwood. We meet on a monthly basis and focus on different aspects of what quality teaching and learning entails. Participants have generated criteria for "what constitutes good learning" that includes such things as having clear plans and goals; a responsive, caring, and approachable teacher; relevant learning experiences that includes hands-on activities; and students are challenged and held to high expectations, among others. These criteria are being used to evaluate service-learning project ideas as well as the professional development sessions. In addition to sharing ideas on curriculum plans for integrating service-learning concepts, monthly sessions have focused on a variety of ways to create coherent, integrated curriculum; learning theories such as brain-based research, multiple intelligences, and constructivism; and on action research as a systematic way for teachers to reflect on teaching and learning.

While the majority of Elwood's faculty are veteran teachers, the 6th, 7th, and 8th grade teachers are relatively young and new to the teaching profession. The 6th grade teacher has shown tremendous growth in his approach and enthusiasm toward teaching. He has commented numerous times that he is learning with his students during the implementation of

a curriculum focused around a service-learning philosophy.

2. Other sites' Title I and service-learning curricular plans. While all demonstration sites are at different points in their planning and implementation processes, the following information provides an overview of tentative plans. Hohokam Middle School in Arizona has implemented a formal study group process in conjunction with their monthly Title I and service-learning professional development meetings. They are planning to develop a student habitat in the open courtyard between school buildings on campus. That space is currently barren and in need of landscaping. As part of their science curriculum, the students will plan the area and actually be involved in creating the habitat that will include planting gardens, trees, and greenery, and creating a hydroponics project. Through this project, children will reinforce concepts they learn in science and math. Seventh grade language arts students plan to record books and distribute them to the elementary children who attend two feeder schools in the districts. Another idea currently being planned is for students to create a promotional brochure that will be used with elementary feeder school students to introduce them to the Hohokam school and faculty.

Harrington Elementary School is planning a community garden. Staff have been meeting with representatives from Denver Urban Gardens, personnel with the University of Colorado youth gardening program, the local community church providing the lot where the garden will be planted, and senior citizen groups. We have been meeting with staff to help them integrate their gardening project into their curriculum and Colorado's educational standards.

The Louisiana elementary and middle schools are each working on different projects. Elementary students are spending considerable time focusing on and discussing the value of

caring that undergirds programs with a service-learning philosophy. In addition to students, staff, parents and community members have been involved in these extensive discussions. Middle school special education students are adopting a local nursing home and working on various projects with residents of the home; sixth grade students at the school are designing a school logo and working on building school and community spirit; and seventh graders are considering a two-year project focused on lobbying for a second roadway into the school.

The Canutillo School District site is relatively new, having only been involved in this project for two months. Teachers at all grade levels of the district are interested in incorporating service-learning into their curriculum. Monthly sessions are addressing ways to create a sense of professional community among the staff and doing extensive planning for next year when they hope to begin widespread implementation.

Preliminary Findings from Demonstration Sites

1. **Frameworks to evaluate change.** The purpose of this paper isn't to delineate models to evaluate adoption of innovations in schools, but it is important to provide a framework to determine the degree of success that demonstration sites are achieving in the implementation of their Title I and service-learning curricular plans. The intent is also to share what we are learning about authentic teaching as we work with these schools in linking Title I and service-learning., While different models stress various critical factors to consider for successful adoption, studies of failed innovations also provide insight into why innovations typically don't succeed in schools. Gross, Giaquinta, and Bernstein, (1970) identified several systemic factors that affect the implementation of any educational innovation: a clear vision of the innovation by administrators and teachers, the staff's skills and capacity to implement the innovation, the availability of required tools and resources, the compatibility of the school's

organizational arrangements (such as scheduling of classes) with the new innovation, and the wholehearted support of the administration for the innovation and for the teachers who are in the process of implementing it.

More recent studies have addressed other factors necessary for successful implementation of innovations. The CORS study addresses what kind of organizational capacity is necessary to sustain innovations in schools that support high quality student learning (Newmann and Wehlage, 1995). Newmann and Wehlage believe that a sense of professional community characterized by shared purpose, collaborative activity, and collective responsibility among school staff is necessary. In identifying necessary conditions to support professional community they say that human resources and leadership are imperative as well as a structural conditions (i. e., interdependent work structures such as teaming, small size, and school-based authority for the operation of the school). Hargreaves (1997) differentiates between restructured and recultured schools. The latter addresses how schools can be made "into the kinds of places that stimulate and support teachers to make changes themselves" (p. 1). He continues

> a central task in creating cultures of educational change is how to develop more collaborative working relationships between principals and teachers, and among teachers themselves (p. 2).

2. **Demonstration sites' impact on student achievement.** Given these frameworks to analyze progress toward meeting our goal we find that we are experiencing varied degrees of success with our demonstration sites. This, we believe is attributable to several factors. One major reason is funding for the third phase of this project that didn't begin until September 1, 1996. It was difficult to secure a sufficient number of sites that were interested in pursuing service-learning as a focus for their Title I programs, as decisions for

future areas of emphases were typically made during the spring semester. While many schools found the concept intriguing, they had already determined and committed to other plans for the current school year.

Consequently, the only site that has been involved continuously since September is the Kansas site. Work at the Louisiana sites and Arizona began in October and November, and the Texas site work just started in February. While the Colorado site has been involved since last fall, we are primarily coordinating efforts there with one faculty person. Just within the last month we have met for the first time with their entire staff.

Given the timeline to find and begin work with demonstration sites meant that we had to compromise some of our criteria for working with sites on this project. All of our sites qualify as schoolwide programs and have a demonstrated need for implementation of the project. While there is a commitment to school improvement for all students to reach their highest potential, we are finding that some teachers at some of our sites hold limited views regarding students' potential. At these sites we are trying to incorporate professional development that helps teachers examine their beliefs, values, and assumptions regarding student learning. Two other criteria -- willingness to engage in an intensive improvement and problem-solving process in a supportive and creative environment and a risk free learning environment that builds capacity for staff -- have been minimally met by several of our sites. One site, in particular, is in the process of political turmoil between the principal and teachers and at another, the principal was replaced mid-year. But a critical mass of teachers at each of these sites has carried this school reform initiative forward and are committed to quality teaching and learning for all children.

We believe grounding Title I programs in a service-learning philosophy will provide

greater opportunities for students to achieve states' high performance and content standards. While we have anecdotal data from several of our sites supporting this premise, we don't have empirical data to support our claim because state assessments in our pilot project sites have not yet been administered this year. These tests are generally given in the last quarter of the school year. Then again, only the Kansas and Louisiana sites have actually implemented service-learning as part of the curriculum. All other sites are still in varying degrees of planning how service-learning can be incorporated into their schoolwide plan for the 1997/98 school year, which is consistent with Title I legislation that requires schools to spend one year of planning time to develop a comprehensive and quality schoolwide plan.

Given some of the turmoil we are experiencing and the late start in some of our demonstration sites we do believe we are accomplishing the three objectives of the demonstration projects. These included working with teachers to develop a clear understanding of how linking service-learning with Title I will help student improve academic skills; exposing teacher to current research on teaching and learning; and exposing teachers to Title I service-learning methods that will help them and students, alike, develop a knowledge about needs in the community and the important role of individual service in meeting those needs. Data to further examine the relationship between service-learning, Title I and student achievement gains will be available later this spring.

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Appendix A

Kansas Quality Performance Accreditation (QPA) Standards

Student Outcome I: All students will demonstrate in academic and applied situations a high level of mastery of essential skills as evidenced by the following standards:

- **Standard A:** Read and comprehend a variety of resources.
- **Standard B:** Communicate CLEARLY, both orally and in writing, for a variety of purposes and audiences.
- **Standard C:** Use mathematics and mathematics principles in problem solving experiences.

Student Outcome II: All students will demonstrate effective communication skills as evidenced by the following standards.

- **Standard A:** Analyze, summarize, and comprehend what is read in all subject areas.
- **Standard B:** Write and orally communicate for
  1. Clear articulation
  2. Analysis
  3. Conceptualization
  4. Synthesis
  5. Summarization of information

Student Outcome III: All students will demonstrate complex thinking skills in academic and applied situations as evidenced by the following standards:

- **Standard A:** Apply problem-solving skills.
- **Standard B:** Find information, analyze, and synthesize it, and apply it to new situations.

Appendix B

Title I and Service-Learning Project Goals

Social Studies

1. Read and comprehend newspaper and periodical articles and advertisements of about fifty years ago to gain knowledge of products and cost of living;
2. Summarize and analyze the above articles to be able to compare and contrast then and now, and to be able to produce drawings and pictures of products of the era;
3. Apply to new situations by producing a stand-up exhibit of products of that time; and
4. Learn the difference between primary and secondary sources.

Social Skills

1. Conduct mock interviews;
2. Conduct an interview with a senior citizen;
3. Call senior citizen and arrange an interview;
4. Hand deliver invitations to the spring celebration;
5. Work with mentor on the project; and
6. Work in groups to develop and complete the project.

Math Skills

1. Use math and math principles in problem-solving experiences;
2. Read recipes and use the principles of measurement equivalencies and proportion to make decorated cookies for senior citizens;
3. Decide how students need to be divided among mentors, library equipment, and tasks;
4. Plan time usage daily, weekly, and monthly in managing the different components of the project;
5. Figure chronological timeline for important events that occurred during the time frame of the project;
6. Describe business trends by examining stock market data, classified employment ads, store ads, etc;
7. Graph economic information; and
8. Graph birthdate information if available.

Cooperative Learning

Language Arts

Oral:

1. Brainstorm contexts of a class letter to senior citizens asking for their help;
2. Brainstorm contents of an interview for senior citizens;
3. Conduct a mock interview with a classmate or mentor;
4. Call a senior citizen and make an appointment to conduct the interview;
5. Conduct and tape record an interview with a senior citizen;
6. Explain progress of project to mentors; and
7. Deliver short speeches to civic groups about project.

Written:

1. Write a class letter to senior citizens asking for their help with the project;
2. Develop an interview form;
3. Write a summary of the mock interview;
4. Transcribe the interview with the senior citizen to discover need for additional information;
5. Write a summary of the interview;
6. Write "Thank You" notes to senior citizen interviewed;
7. Write short speeches to be delivered to civic groups, explaining the project;
8. Write up the history of each senior citizen interviewed;
9. Compile a book of local personages; and
10. Engage in journaling throughout the project to share with mentor.

Complex Thinking Skills in Applied Situations

1. Engage in group project planning;
2. Design project products: cookie gift container, interview form, book of local history, standup display; and
3. Plan special day for senior citizens to come to school.

Technology

1. Used in project: tape recorders, computers, camcorders, microfilm, opaque projectors, Internet.